

**Amendments to the Claims:**

1-31. (canceled)

32. (currently amended) ~~The~~An isolated nucleic acid ~~of Claim 28~~ having at least 99% nucleic acid sequence identity to[[:]]

(a) ~~— a nucleic acid sequence encoding the polypeptide shown in Figure 220 (SEQ ID NO:376);~~

(b) ~~— a nucleic acid sequence encoding the polypeptide shown in Figure 220 (SEQ ID NO:376), lacking its associated signal peptide;~~

(c) ~~— a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 220 (SEQ ID NO:376);~~

(d) ~~— a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 220 (SEQ ID NO:376), lacking its associated signal peptide;~~

(e) ~~— the nucleic acid sequence of SEQ ID NO:375 shown in Figure 219 (SEQ ID NO:375);~~

(f) ~~— the full length coding sequence of the nucleic acid sequence shown in Figure 219 (SEQ ID NO:375); or~~

(g) ~~— the full length coding sequence of the cDNA deposited under ATCC accession number 203473;~~

wherein the nucleic acid encodes a polypeptide that inhibits the uptake of glucose or FFA (free fatty acid) by adipocyte cells.

33. (currently amended) An isolated nucleic acid comprising[[:]]

(a) ~~— a nucleic acid sequence encoding the polypeptide shown in Figure 220 (SEQ ID NO:376);~~

(b) ~~— a nucleic acid sequence encoding the polypeptide shown in Figure 220 (SEQ ID NO:376), lacking its associated signal peptide;~~

(c) ~~— a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 220 (SEQ ID NO:376);~~

(d) ~~— a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 220 (SEQ ID NO:376), lacking its associated signal peptide;~~

(e) ~~— the nucleic acid sequence of SEQ ID NO:375 shown in Figure 219 (SEQ ID NO:375);~~

(f) ~~— the full length coding sequence of the nucleic acid sequence shown in Figure 219 (SEQ ID NO:375); or~~

(g) ~~— the full length coding sequence of the cDNA deposited under ATCC accession number 203473~~

34. (canceled)

35. (canceled)

36. (canceled).

37. (canceled)

38. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic acid sequence of SEQ ID NO:375 shown in Figure 107 ~~SEQ ID NO:375~~).

39. (canceled)

40. (canceled)

41. (canceled)

42. (canceled)

43. (canceled).

44. (currently amended) A vector comprising the nucleic acid of Claim 32 [[28]].
45. (previously presented) The vector of Claim 44, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.
46. (currently amended) An isolated host cell comprising the vector of Claim 44.
47. (previously presented) The host cell of Claim 46, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.